

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
	10/772,690	02/05/2004	Leslie G. Fritzemeier	038190/273847	5143	
	826	7590 07/25/2006		EXAMINER		
	ALSTON &		MORILLO, JANELL COMBS			
	BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000		1000	ART UNIT	PAPER NUMBER	
				1742		
				DATE MAILED: 07/25/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/772,690	FRITZEMEIER I	ET AL.			
Office Action Summary	Examiner	Art Unit				
	Janelle Combs-Morillo	1742				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence a	address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period v.  Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 03 M	ay 2006.					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	action is non-final.					
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-11 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-11</u> is/are rejected.	<u></u>					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ acce	epted or b) $\square$ objected to by the $\mathbb R$	Examiner.				
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form F	PTO-152.			
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> </ul>	s have been received.	., .,				
<ol><li>Copies of the certified copies of the prior</li></ol>	ity documents have been receive	ed in this Nationa	al Stage			
application from the International Bureau	, , , , , , , , , , , , , , , , , , , ,					
* See the attached detailed Office action for a list	of the certified copies not receive	d.				
Attachment(s)	_					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)					
Paper No(s)/Mail Date <u>020504</u> .	5) Notice of Informal P 6) Other:		ΓΟ-152)			

Application/Control Number: 10/772,690 Page 2

Art Unit: 1742

### **DETAILED ACTION**

# Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luton (US 4,818,481).

Luton teaches an aluminum alloy comprising alloying elements selected from a group comprising Mg and other additives including Ti and Zr (column 6 lines 63-column 7 line 6), 0.1-0.5vol% aluminum oxy-nitrides (column 6 line 42, column 15 lines 22-23) which increase the strength of the aluminum matrix by at least 10% (column 6 lines 37-38). Luton teaches cryomilling in nitrogen and forming ox-nitrides in amounts that fall within the instant nitrogen range.

Luton does not specify the amounts of said additives. However, because Luton teaches the amount of aluminum matrix metal is preferably >90%, then the balance of said alloy would to be said additives. Therefore, because Luton teaches an overlapping alloying ranges, it is held that Luton has created a prima facie case of obviousness of the presently claimed invention (MPEP 2144.05).

Application/Control Number: 10/772,690 Page 3

Art Unit: 1742

# Response to Amendment

3. In the response filed on May 3, 2006 applicant submitted various arguments traversing the rejections of record. The ODP rejection has been overcome.

- 4. Applicant's argument that the present invention is allowable over the prior art of record because Luton teaches the total amount of oxy-nitrides present will be at least 10% has not been found persuasive. Luton teaches incorporating 0.1-0.5vol% aluminum oxy-nitrides (column 6 line 42, column 15 lines 22-23) which *increase the strength of the aluminum matrix by at least 10%* (column 6 lines 37-38). The examiner points out that the amount of refractory materials present in the instant alloy (and therefore held to be within "substantially free") is discussed in the specification at [0016], and the content of said refractory materials is preferably present in ≤ 0.5vol%, which is met by the range taught by Luton.
- 5. Concerning the argument that the oxy-nitrides taught by Luton are excluded by the "consisting essentially of" language of independent claim 10, the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. In re Herz, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). The applicant has not shown that the addition of said oxy-nitrides would affect the basic and novel characteristic of said alloy.

#### Terminal Disclaimer

6. The terminal disclaimer filed on May 3, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 6,902,699 has been reviewed and is accepted. The terminal disclaimer has been recorded.

#### Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/772,690 Page 5

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.